1: McGee E-5 (1894-1895)1898 NU31 Seri NU31

147 do swift stroke and strong grasp and dexterous digitation, are mainly
182 such as urge manual development more strenuously than would be normal among tribesmen connected with their environment through the medium of tools. The demand for manual strength and skill is intensified among the Seri by both natural and domestic conditions; the ever-ready (and almost the sole) material suitable for simple adjuncts to the hand abounds in the form of wave-worn cobbles; these cobbles are easily usable in such wise as to serve all ordinary purposes, and their abundance discourages the production of more highly differentiated tools; while their habitual use promotes manual strength and deftness, coupled with that digital freedom (required, for example, in grasping a ball) which most clearly distinguishes the human hand from the subhuman paw. Conjoined with these natural conditions are domestic demands tending to cultivate manual fitness and eliminate the manually unfit; for, in addition to the direct industrial premium on dexterity, through which the dexterous survive while the clumsy starve, there is a special premium growing out of the marriage custom, through which
● [143] only the manually efficient (and at the same time morally acceptable) are put in the way of leaving lines of descendants.[1] Naturally, in view of the combination of factors, all traceable directly or indirectly to environmental conditions, the Seri afford a peculiarly striking example of cheirization extended to an entire tribe (if not to a genetic stock of people)—indeed the remarkably developed Seri hands and feet first suggested the importance of this process of human development and led to its formal characterization.

Accordingly, the robust-bodied and slender-limbed yet big-fisted and
143 big-footed Seri seem to be adjusted, so far as several of their more
182 striking somatic characters are concerned, to distinctive habits themselves reflecting a distinctive habitat; and the coincidences appear to reveal and establish the law of interaction between the human organism and its environment—an interaction effected through the habits and hence through the normal functioning of the individual organisms as constrained through their collective relations. And recognition of the
147 law of interaction opens the way to consideration of other correspond-
143 ences between structures and functions and environing conditions.
182 Conspicuous among the more strictly functional traits of the Seri is
312 the intensity of action characteristic especially of the warriors, though in less degree of the entire tribe—an intensity made all the more striking by contrast with the extreme inertness between stresses. Manifestly the capacity for concentrated effort is in harmony with the tribal habits, themselves reflecting habitat. The resource of prime importance in Seriland—that which directly and constantly conditions the very existence of human inhabitants—is potable water. This prime source of life is too heavy to be transported and too unstable to be stored with the facilities of primitive culture, yet it is always within reach of an organism strong enough to journey ten or twenty or fifty

[1] The marital customs of the tribe are described postea, pp. 179-187.

1: McGee E-5 (1894-1895)1898 NU31 Seri NU31

miles in search of it, and acute enough to follow trails and indications. Naturally the meager water-supply serves as a mechanism for sorting out and preserving the strong and the acute, and for eliminating the weakly and the dull; and hence the tribe have developed a faculty, or perhaps a potentiality, of distinctive sort—the potentiality of providing against thirst-death by a reserve power in the organism itself rather than in the form of mechanical devices such as characterize higher culture. Quite similar are the relations to the resource of second importance, i. e., ordinary food. Habituated to dispensing with storage and transportation of their primary resource, and accustomed to finding food whenever forced to sufficiently active effort to obtain it, the Seri have never grasped that first principle of thrift expressed in the accumulation of food supplies; and accordingly they intuitively rely on successful fishing or chase or search of vegetal edibles for sustenance, and habitually delay effort until they are stirred into activity by the pangs of hunger. Naturally this improvidence serves as another mechanism for perpetuating families of stored vitality, and especially those able to prevail over swift or strong or cunning quarry by sustained vigor and alertness after prolonged deprivation; and the effect of this mechanism, too, is to develop a reserve power in the organism itself, in lieu of the material reserve made through thrift in higher culture. Similar in their consequences are the relations of the individual organisms to the third industry of Seriland, i. e., navigation of the gale-swept and tide-troubled waters. Even the buoyant balsa can not weather the williwaws or ride the tiderips of El Infiernillo without exercise of the utmost strength and skill on the part of the navigators; while the often persistent storms may delay for days embarkation on voyages in quest of fresh water or food. Naturally, the frequent delays and not infrequent perils of such navigation constitute a mechanism for selecting navigators possessed of reserve powers adequate to meet desperate emergencies with vigor and judgment even after enervating waits for wind and tide, while those not so well endowed are either brought up to standard in their hard training school or expelled from their class by drowning or dashing on the rocks, as may happen; so that the effect of this mechanism also is to preserve individuals and perpetuate generations characterized by reserve power, and hence to develop latent potentiality in the tribe. Now, the normal product of these and other natural mechanisms immediately reflecting environmental conditions is capacity for sports, or for intense functioning under severe stress, despite accentuation of the stress by thirst or hunger or exhaustion, or by all combined—i. e., the effect of habitat and habit is to produce precisely such a somatic regimen as that so conspicuously displayed by the Seri folk. So the intensified activity with long intervals of inertness, simulating the habits of carnivorous and some other lower animals, and hence suggesting primitive condition, would appear to be largely a phylogenetically acquired character expressing specific adjustment to environment.

L McGee E-5 (1894-1895)1898 NU31 Seri NU31

race-sense dominates the race-type—that the Seri are farther away from neighboring tribes in feeling than in features, in function than in structure, in mind than in body. Now, in seeking the sources of this distinctive (not to say specific) race-sense, several suggestions arise. Naturally the first suggestion is that of simple sexual selection, the (assumptive) analogue of an important factor in biotic evolution; but the suggestion is at once apparently negatived by the fact that all the mature men and women are married and have families of children proportionate to their ages. True, undesirable spouses may be expelled from the tribe, or even executed (as intimated by neighboring Sonoreuses); yet there is little evidence that either method of selection is employed among the Seri more largely than among other peoples; and, as all recent researches indicate, the higher peoples at least have risen above the plane of sexual selection per se as an effective factor in somatic development. A second suggestion arises in the axiom (vivified by realization of the connection between Seri movements and Seri structures) that perfected organs are the product of stressful functioning—indeed, the suggestion is but the extension of the axiom from the individual to the stirp and the group. In developing the suggestion it is convenient to divide the career of the stirp into periods defined by the successive wax and wane of vitality in its most significant manifestations; and this may be done in terms of successive individual lifetimes in their three successive aspects of (1) youth, (2) maturity, and (3) senility, in which the dominant constructive functions are respectively (1) somatic growth, (2) collective growth (comprising both procreation and the accumulation of artificial possessions), and (3) dissipation of somatic vitality and distribution of extrasomatic accumulations (generational as well as material and intellectual). Now, it is a commonplace in every stage of culture that vital capacity, and also the inherent sense of kind manifested in pairing, culminate in the medial portion, or prime, of individual life; and if this universal recognition is valid, it is just to hold that the career of the stirp is defined by the successive vital climaxes expressing the primes of the series of generations pertaining to the stirp. It follows that each generation must represent, not the average qualities of the entire generation past, but the qualities of the most virile and maliebrile fraction of that generation; whence it follows in turn that in general the generations must develop along the lines most prominent in the lives of each people in their prime. The process may be formulated as the *law of periodic conjugation*, under which successive generations are initiated, not at random, but at periods of culminant effectiveness in shaping the course of the stirp. The immediate application of this law to the Seri tribe is manifest, for it explains (the initial condition of isolation and the consequent incipient segregative habit being given) how and why the tribal standards have grown more definite from generation to generation, and have intersected cumulatively with the distinctive environment in such manner as continually to widen the chasm between the desert-

1: McGee E-5 (1894-1895)1898 NU31 Seri NU31

143 bound tribe and their alien neighbors. Yet the general application of the law leads only to a more specific application; for, just as the career of the stirp is made up of a succession of vital maxima and minima, so the lifetime of the individual, even in the median stage, is made up of a series of vital climaxes separated by relatively inert intervals; and, as recognized by every naturalist and romancist, every philosopher and poet, in every stage of culture, it is during the periods of conative domination by the master passion that the career of the individual is shaped and that the stirp-sentiment (or susceptibility to kind) culminates in intensity. It follows that the progeny of successive generations represent not merely the optimum median stage of life in which vitality and virility and muliebrity are at flood, but the very climaxes of this stage in which manhood and womanhood attain their ideals, and in which the ideals react on the physical system with unequaled intensity; it follows in turn that each generation must (in so far as intellectual tension can control long series of metabolic interactions after the manner in which short series are controlled by direct volitional exercise) incarnate the ideals of the preceding generation; whence it follows still further that in general isolated race-types tend constantly and cumulatively to increase in definiteness—at least until the somatic factors are counterbalanced by demotic relationships arising with considerable increase in population. It is true that the extent to which the incarnation of ideals is effective or even possible has not been measured; it is also true that the naturalists of the higher culture-stages commonly neglect the process; yet the occasional recognition of its positive aspects, as in Goethe's "elective affinities" and in Jacob's getting of "ring-straked, speckled, and spotted" stock (Genesis XXX, 37–41), and the practically universal recognition—more especially among primitive peoples—of its negative aspect in adverse prenatal influences, clearly indicates its importance; the fact that the ancient Greeks at once idealized in unparalleled degree, and produced unexcelled perfection in, the human form being of no small significance. Even if the measure of the incarnation of ideals be reduced to the lowest minimum consistent with common knowledge, it remains true that the progeny of successive generations are not the offspring of average parents, but of pairs at the perfection and conjugal culmination of their virile and muliebrile excellencies; so that the generations must run in courses of cumulatively increasing racial (or human) perfection, under a general *law of conjugal conation*.

143 182 186 In extending the general law of conjugal conation to the Seri, it is found peculiarly applicable, in view of their distinctive marriage custom, the effect of which is to intensify conjugal sentiments, with the attendant magnification, and potential if not actual incarnation, of ideals.[1] Accordingly there would appear to be a harmony between

[1] The law of conjugal conation was indeed suggested by observations on the peculiar marriage customs and peculiarly developed race-sense of the Seri tribe, and it has already been applied in certain of its aspects as an explanation of the initial humanization of mankind (The Trend of Human Progress, American Anthropologist, new series, vol. I, 1899, pp. 625–655).

1: McGee E-5 (1894-1895)1898 NU31 Seri NU31

Seri race-sense and Seri race-type no less delicate than that between the stressful action and the stress-shaped structures of the tribe, and while the inception of both type and feeling may be ascribed to the isolated environment, it seems manifest that both have interacted constructively and in cumulative fashion through a significant process exemplified more clearly by this tribe than by others thus far studied. At the same time, analysis of the harmony between type and sentiment indicates that the lowly Seri are actually, albeit unconsciously, carrying out a meaningful experiment in stirpiculture—an experiment whose methods and results are equally valuable to students. The Seri gymnastic and the Seri stirpiculture are in close accord, in that both are conditioned by initially dilatory yet ultimately intense action; the results are equally accordant in that the one conduces toward individual vigor and the other toward a vigorous and distinctive stirp; while the excellence of the methods (viewed from the somatic standpoint) is attested by the magnificence of the product. Now, comparison of the stirpicultural Seri with contemporary tribes shows that the desert-bound folk have attained unequaled somatic development, and suggests that the intuitive stirpicultural processes have been rendered peculiarly effective through the persistence of that tribal isolation in which the processes apparently took rise; so the race-sense of the Seri may be regarded as the product of long-continued stirpicultural processes, initially shaped by environment, yet developed to unusual degree by somatico-social habits, kept alive largely through continuous environmental interaction.

Summarily, the Seri are characterized by noble physique, by peculiarly swift and lightsome movements, by great endurance coupled with capacity for vigorous action, by animal-like symmetry and slowness of maturation, and by various minor attributes combining with the major features to form a distinctive race-type; and they are still more conspicuously characterized by an acute race-sense which holds them apart from all aliens. At first sight, several of their somatic attributes seem incomparably primitive, yet analysis of the attributes in the light of certain laws which they exemplify better than other peoples thus far studied indicates not so much a lack of development as an excess of growth along purely somatic lines, with a correlative defect of development along demotic lines; and when the lines of growth are traced to the sources and conditions, it becomes fairly clear that the aberrant development of the tribe is merely the reflection of a distinctive environment operating (evidently) throughout a long period. In brief, the somatic interest of the Seri seems to center in the remarkable adjustment of the tribe to a peculiar environment—an adjustment of such delicacy as to imply interaction throughout many generations.